

ABSTRACT

In Education Institution, presence is something that is very important to be able to record the attendance list every student. Eventually, the results of student attendance records can be used as information by Education Institution (University, School, etc.) in the form of a list of student presences. In the process of student presences, there is various ways such as fill in the identity sheet that has been provided by the providers of education, and with the development of technology today many institutions that implement technology in the activities of the presence. Presence system at University of Muhammadiyah Yogyakarta (UMY) itself is still manual for students that is filling personal identity. Problems that occur when presenting manually are time consuming, not effective and efficient, and require a lot of paper (wasteful). Moreover, presenting at the time of practicum activity where the time provided less than the activity of college, will be very time consuming if presenting manually, so that needed a tool to the activity of presences during practicum more effective and efficient. Presence tool can be created by utilizing the current technology that is Internet of Things (IoT) technology where everything can be connected to each other with internet which usually assisted by the sensor. The sensor used in this presence is Bluetooth Low Energy (BLE) in the form of ibeacon which can use low-power bluetooth connection to broadcast and receive information in limited area.

Keywords: *Presence, Manual Presences, Internet of Things (IoT), Bluetooth*